HLY78

Catalog No.C12566 Batch:C1256603

Product Datasheet

Technical Data

Formula	$C_{17}H_{17}NO_2$					
Molecular Weight	267.32	**CAS No.**	854847-61-3			
Solubility (25°C)*	In vitro	DMSO	53 mg/mL (198.26 mM)			
		Ethanol	26 mg/mL (97.26 mM)			
		Water	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.
		Injection	Clear solution	5%DMSO [1]→ 40%PEG300 [2]→ 5%Tween80 [3]→ 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	2.650mg/ml (9.91mM)	Taking the 1 mL working solution as an example, add 50 μL of 53 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1]→ 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	2.650mg/ml (9.91mM)	Taking the 1 mL working solution as an example, add 50 μL of 53 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume \ Mass	1 mg	5 mg	10 mg
1 mM	3.7408 mL	18.7042 mL	37.4083 mL
5 mM	0.7482 mL	3.7408 mL	7.4817 mL
10 mM	0.3741 mL	1.8704 mL	3.7408 mL
50 mM	0.0748 mL	0.3741 mL	0.7482 mL

Biological Activity

Description	HLY78 inhibits apoptosis in tumor cells and embryonic cells caused by carbon ion radiation through activation of the Wnt/β-catenin pathway.
In vitro	HLY78 is an activator for the Wnt/β-catenin signaling pathway, which acts upstream of β-catenin and functions only in the presence of the Wnt3a ligand, and targets the DIX domain of Axin and potentiates the Axin-LRP6 association, thus promoting LRP6 phosphorylation and Wnt signaling transduction.[1]
In vivo	This compound attenuates neuronal apoptosis and the neurological deficits after SAH through the activation of low-density lipoprotein receptor-related protein 6 (LRP6), which subsequently increased the level of phosphorylated glycogen synthesis kinase 3 beta (p-GSK3β) (Ser9), β-catenin, and Bcl-2, accompanied by a decrease of p-β-catenin, Bax, and cleaved caspase 3.[2]

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  HEK293T cells
- **Concentrations**
  2.5, 5, 10, 20 μM
- **Incubation Time**
  1+6 h
- **Method**
  The HEK293T cells were transfected with the topFlash plasmid, Δn-β-catenin or both. the cells were treated 18 h later for 1 h with DMSO or HLY78 followed by the control conditioned medium, the Wnt3a conditioned medium or 8 mM LiCl plus the same dose of this compound for an additional 6 h before the luciferase activity assays.

References

https://pubmed.ncbi.nlm.nih.gov/23892894/ https://pubmed.ncbi.nlm.nih.gov/32562163/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

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EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com